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The Asia Pacific Natural Hazards Information Network (APNHIN; <http://apnhin.pdc.org>)

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EAST-WEST CENTER





Abstract

Built upon the underlying specifications and technologies of The Geography Network, the Asia Pacific Natural Hazards Information Network (APNHIN) is a customized Web-based application whose goal is to provide natural hazards information for the Asia Pacific region. The Pacific Disaster Center has designed APNHIN to be Open GIS Consortium (OGC) compliant, allowing users of different software packages and data needs to fully utilize this ability to share geospatial information. Use and navigation of the site, including data access and retrieval, and methods of participating in APNHIN will be discussed along with a live demonstration.



Asia Pacific Natural Hazards Information Network (<http://apnhin.pdc.org>)

APNHIN Vision

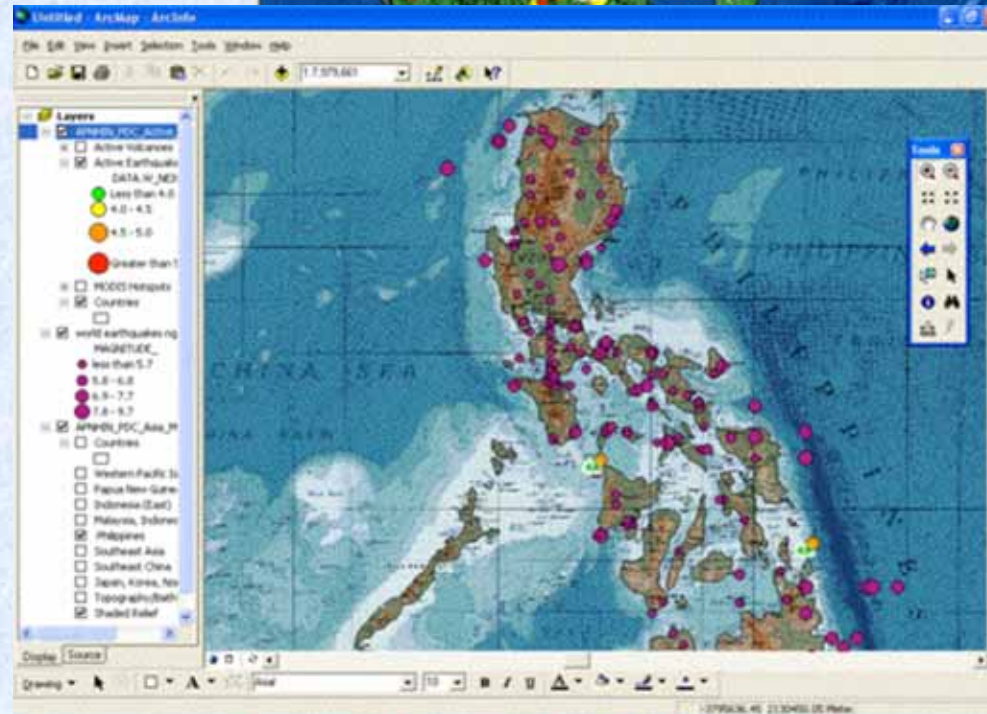
- Engage other participants in formation of a distributed information network to foster sharing of geospatial data resources supporting natural hazard risk and vulnerability assessment and mitigation applications in Asia-Pacific.
- Leverage ...
 - Advances in internet and spatial data technologies
 - Advances in Off-the-Shelf S/W and other standards
 - Investment in development of data resources
- Develop and apply...
 - Common geospatial data framework / schema for hazard data
- Foster ...
 - Improved understanding of availability of data resources
 - Improved understanding of hazards, vulnerabilities, and risk
 - Improved sustainable development and disaster risk mitigation strategies

Automated Acquisition & Processing

- Perl scripts, C code, etc.
 - FTP push, FTP pull, HTML "harvest"
 - Parse & populate data structures
 - Monitoring Scripts

Current Layers

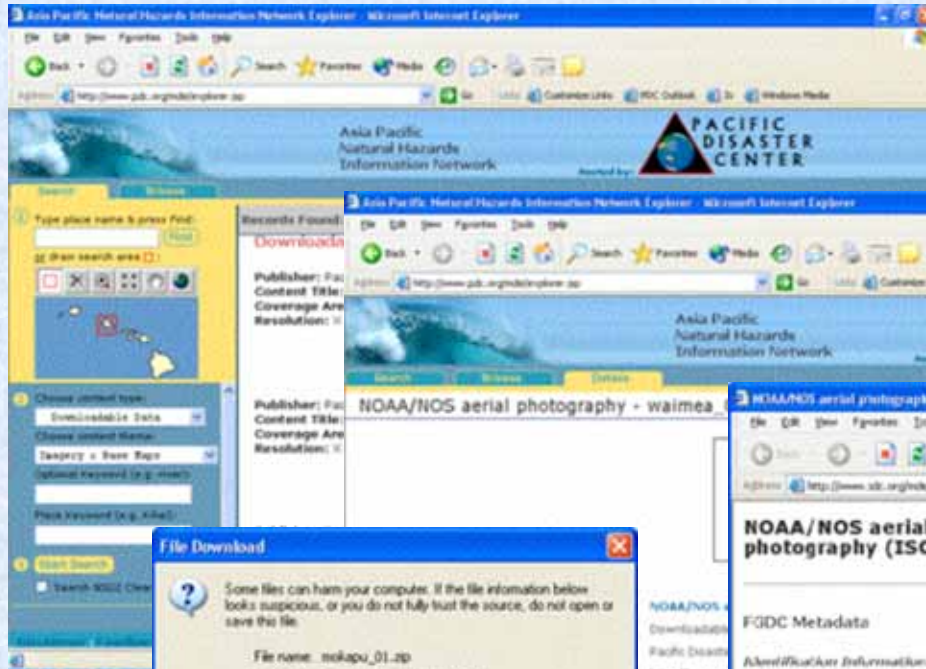
- Tropical Storm Tracks/Forecasts
 - NWS, JTWS
 - 6 hr. updates
- Earthquakes
 - USGS NEIC
 - 5 minute updates
- Volcanoes
 - SWVRC
 - 2x per day
- Wildfires / Hot Spots
 - MODIS / NASA
 - 4x per day
- Hydronet Rain Gauge
 - NWS
 - 15 minute updates
- Global Cloud Cover
 - NASA
 - 30 minute updates





Using APHNIN to Access Data

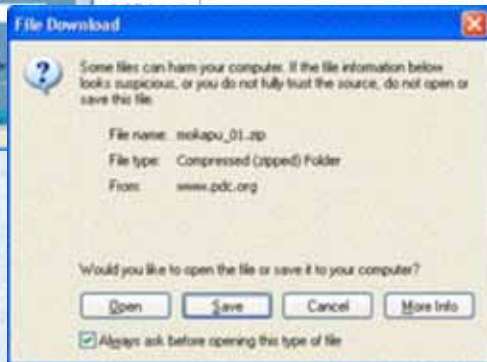
Search by Region-of-Interest & Keywords



Search

Review

Understand



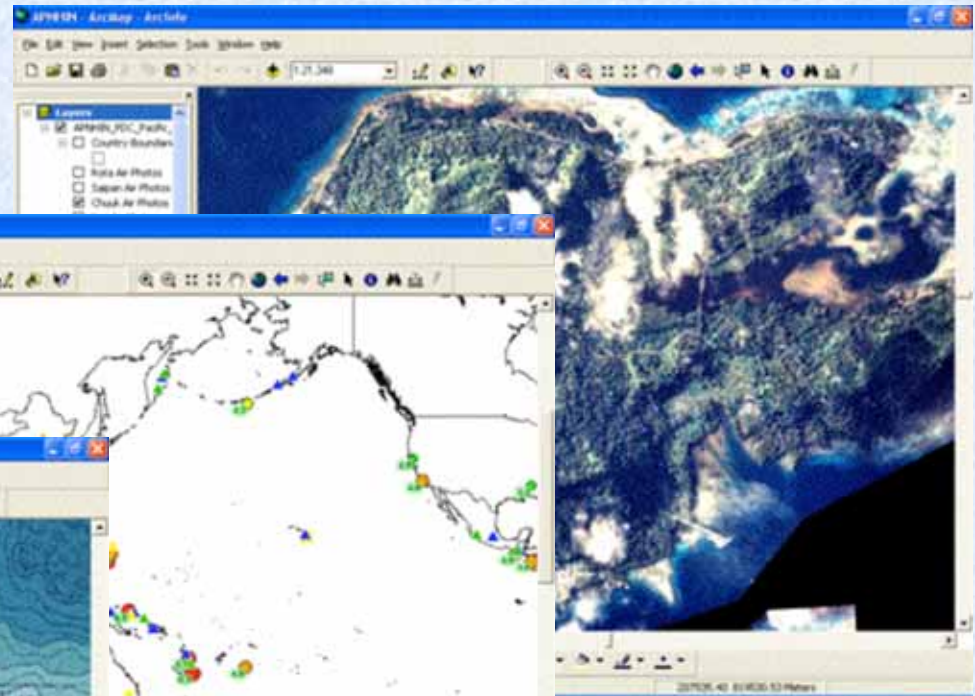
Obtain

<http://apnhin.pdc.org>

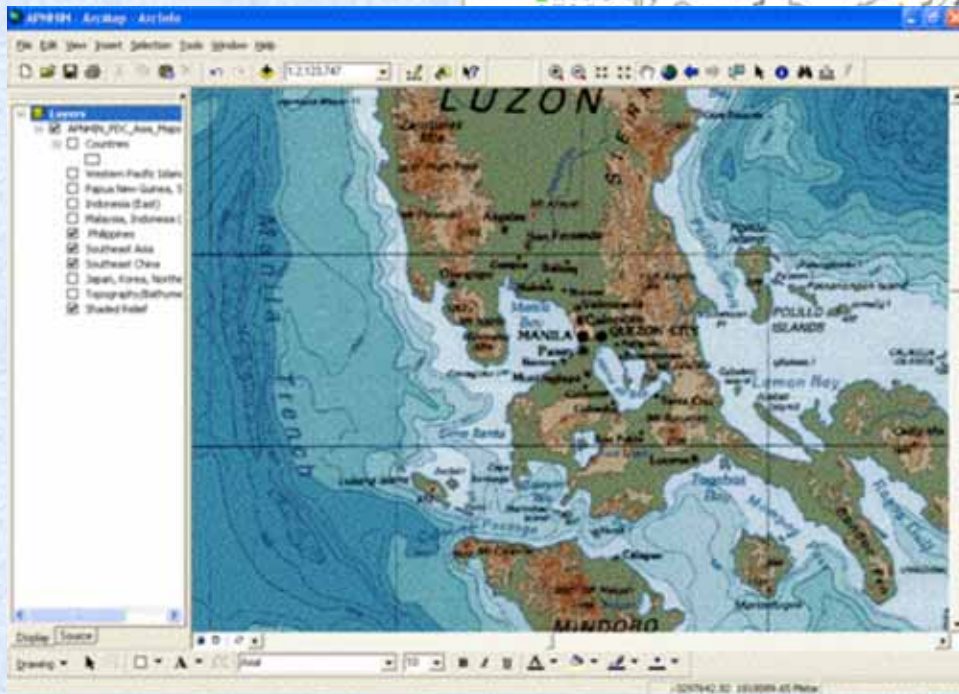
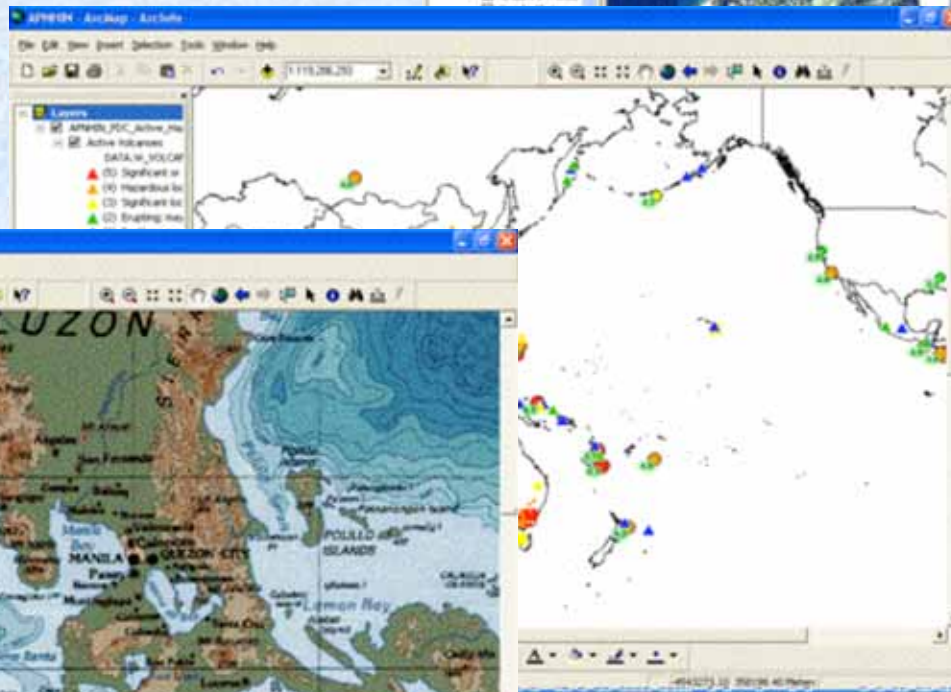


PDC's APNHIN Services

Pacific Island Imagery



Active Hazards

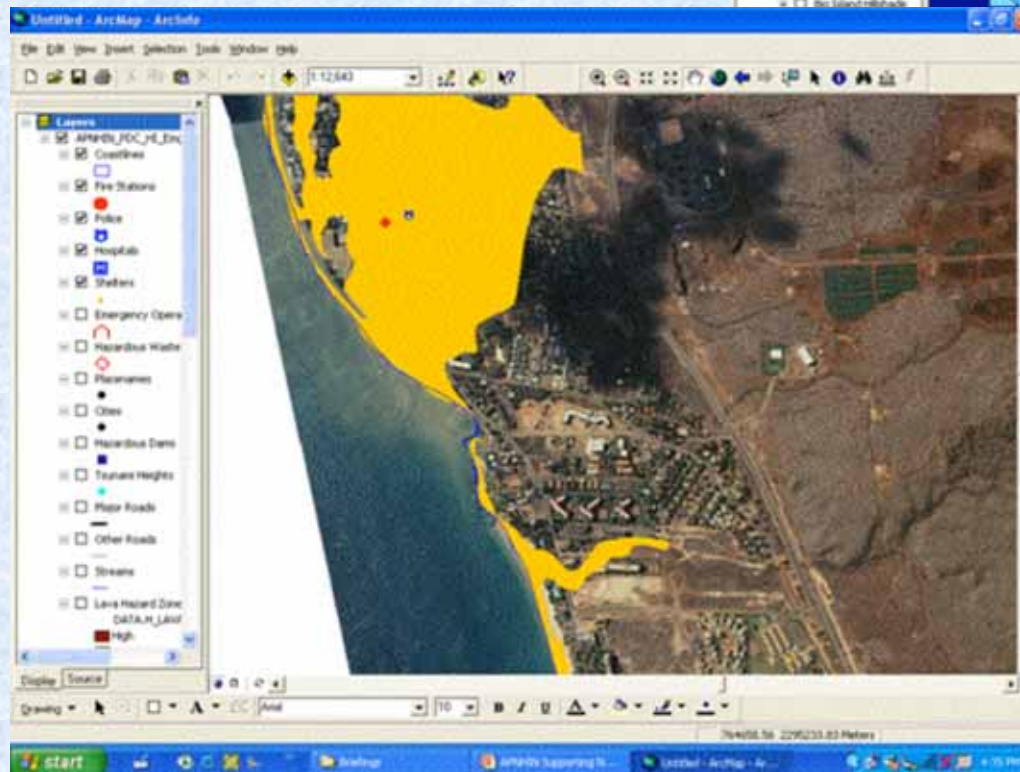
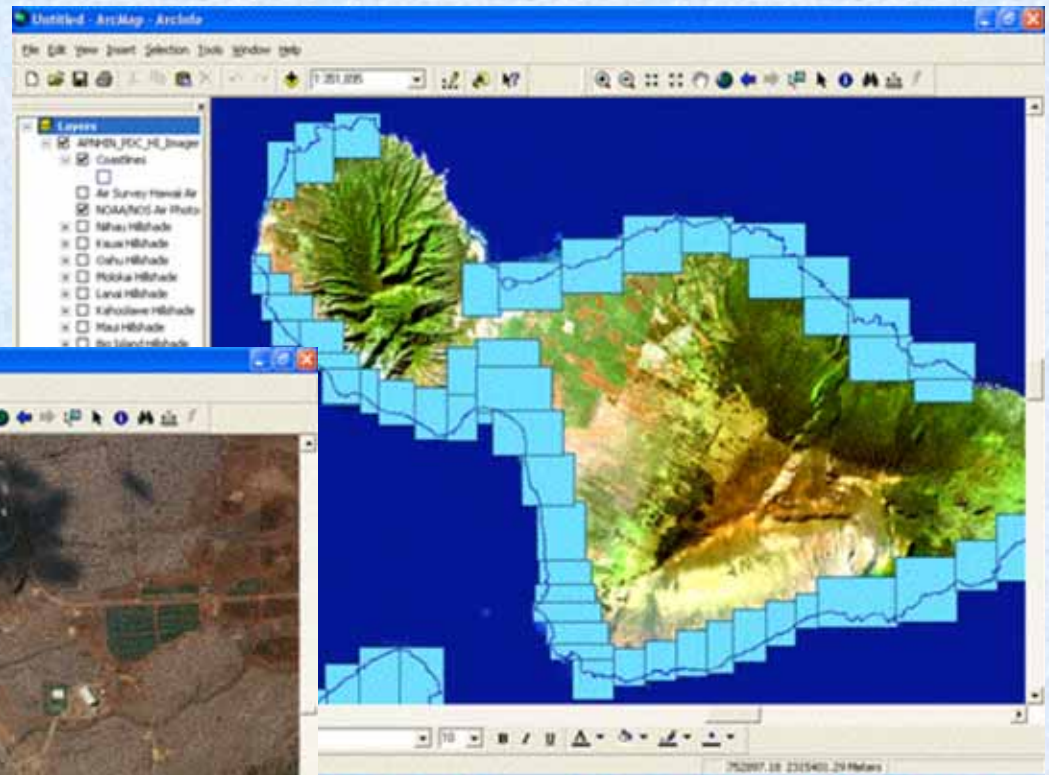


Maps/ Digital Raster Graphics



PDC's APNHIN Services (Hawaii)

Imagery / Remote Sensing

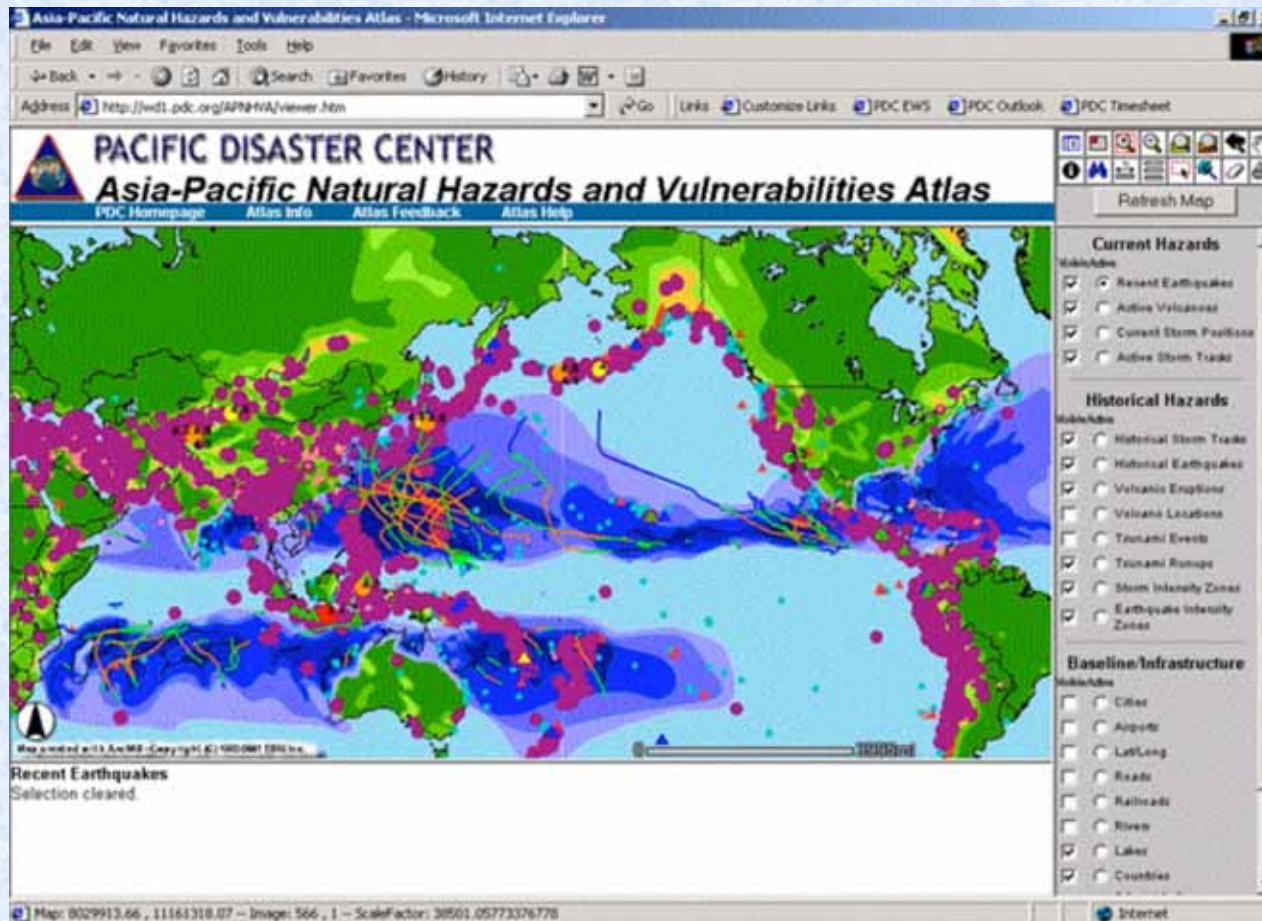


Emergency Services



Asia Pacific Natural Hazards Atlas

Web-based, Geospatial Information Application Supporting Regional Hazard and Vulnerability Assessments



- Natural Hazards
 - Tropical Storms
 - Wildfires
 - Earthquakes
 - Tsunamis
 - Volcanoes
 - *Floods*
- Risk Exposure
 - People
 - Infrastructure

<http://atlas.pdc.org>



Tsunami Response Map Viewer

http://www.pdc.org - South East Asia and Indian Ocean Tsunami Response Map Viewer - Microsoft Internet Explorer

PACIFIC DISASTER CENTER *South East Asia and Indian Ocean Tsunami Response Map Viewer*

[PDC Homepage](#) [Feedback](#) [Disclaimer](#)

Tools

- Help
- Legend/Layers
- Overview
- Zoom In
- Zoom Out
- Full Extent
- Zoom Active
- Zoom Last
- Pan
- Identify
- Identify All
- Query
- Measure
- Set View
- Select Box
- Clear
- Done

Layers

- All Layers
- 26Dec04 Earthquake Epicenter
- Recent Earthquakes
- Tsunami Information
- Baseline
- Cities
- Airports
- Area of Interest
- Coastlines
- Country Boundaries
- Country Labels
- Population Density
- Sumatra Baseline
- Moderate Resolution Imagery
- High Resolution Imagery
- CSB Imagery Coverage
- PDC Processed Imagery
- India
- Indonesia
- Myanmar
- Sri Lanka
- Thailand
- Scanned Maps
- Elevation
- Shaded Relief (SRTM East)
- Shaded Relief (SRTM West)

TDC Help

- Closed group, click to open
- Open group, click to close
- Hidden group/layer, click to make visible
- Visible group/layer, click to hide

19° 14' 12" N 93° 17' 8" E

Internet



Becoming an APNHIN Partner

Formalize relationship with PDC

- MOA detailing roles and responsibilities of parties, general categories of data, access constraints, etc.

Identify resources supporting hazard applications

- Geophysical / natural hazards
- Risk and vulnerability measures

Prepare data documentation (metadata)

- ISO/FGDC-consistent
- PDC Metadata automation tools (ArcCatalog extension)
 - APNHIN Starter Kit

Three modes of supplying users of APNHIN with data:

1. **Offline Data**: Provides data to user on media (CD, DVD, etc.)
2. **Downloadable Data**: Allows APNHIN users to download data directly from participating organization via a link in metadata, supplied by data provider.
3. **Interactive Data Service**: Use of web mapping software to create live map services that are available to users of APNHIN



APNHIN Partners

The screenshot displays the APNHIN website with a search interface on the left and a list of partners on the right. A red circle highlights the 'List of Partners' link, and a red arrow points from it to the partner list.

Search Interface:

- Search bar: "Type place name & press Find:"
- Map: "or draw search area" with a world map and drawing tools.
- Buttons: "Start Search", "Search NSDI Clearinghouse", "Partners", "Click here for: List of Partners", "PDC Managing Partner:"

Partners List:

- PACIFIC DISASTER CENTER**: The Pacific Disaster Center provides applied information research and analysis support for the development of more effective policies, institutions, programs, and information products for the disaster management and humanitarian assistance communities of the Asia Pacific region and beyond.
- USGS**: The U.S. Geological Survey (USGS) is committed to meeting the Nation's needs for current base geographic data and maps.
- The National Map**: The National Map is a consistent framework for geographic knowledge needed by the Nation. It provides public access to high-quality, geospatial data and information from multiple partners to help support decision making by resource managers and the public. For more information about The National Map, [click here](#). To zoom to Hawaii in The National Map viewer, [click here](#).

Footer: PDC - 588 Lipoa Parkway Suite 250, Kīhei, HI 96753 1.800.891.0525



Interested in Participating in APNHIN?

For more Information please e-mail:

apnhin@pdc.org

Visit APNHIN at:

<http://apnhin.pdc.org>